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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/406,570	09/24/1999	AKIHIKO SHIMIZU	2271/57219-A	1757

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT PAPER NUMBER

2653

DATE MAILED: 10/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/406,570

Applicant(s)

SHIMIZU ET AL.

Examiner

Aristotelis M Psitos

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Applicants' response of 7/31/02 has been considered with the following results.

#### ***Drawings***

The amendment to Figure 17 as --Prior Art is acknowledged and approved by the examiner.

The drawings are objected to for not labeling fig. 11 as PRIOR ART, nor as responding to the objections to the drawings as indicated in the OA of 10/02/00.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Failure to comply will result in ~~AB~~ANDONMENT OF THIS APPLICATION.

#### ***Specification***

Again, applicants' cooperation in either providing a copy in Japanese or an English translation if available of the acknowledged prior art as indicated on page 4 line 23 is requested. Failure to comply will result in unnecessary delays in the prosecution.

#### ***Claim Rejections - 35 U.S.C. § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 8-12 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling. The connection between the information track and the phase pit is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Applicants' arguments presented are not persuasive. There is no other disclosure, i.e., that the phase pit is NOT connected to an information track contained anywhere in the specification.

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2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-5, and 7-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' have submitted three independent product claims.

The examiner cannot discern any patentable features missing from the independent claims, i.e., all the limitations of claim 1 are found in claims 8 and 13. Similarly, all the limitations of claim 8 are found in claims 1 and 13, and all the limitations of claim 13 are found in claim 1 and 8.

With respect to claims 1 and 8, as argued/stated in applicants' response on pg. 7, these claims differ in three aspects:

a) no grooves in claim 1, whereas there are grooves in claim 8.

Since the only disclosure in the specification is to grooves, claim 1 fails to recite critical subject matter – grooves less medium is NOT disclosed. The examiner suggests amending claim 1 accordingly.

b) no lands in claims 8 and 13, whereas there is land(s) found in claim 1.

Again, since there is no disclosed disk without land(s), these claims fail to particularly point out and distinctly claim the invention. The examiner suggests amending claims 8 and 13 appropriately.

When such an amendments are done, claim 1, claim 8 and claim 13 will not patently distinguish one from another, i.e., they would be identical.

The dependent claims fail to correct the above deficiency and fall with their respective parent claim.

#### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 18, 7, 8 and 13 are rejected under 35 U.S.C. 102(b/e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either Onagi, or Nakayama et al or Inui et al.

Under 102 considerations,

a) Onagi discloses a disk having land and grooves, wherein the information is found appropriately. Furthermore, there are phase pits (pre pits) for recording of address information, and these pits are found connected on an information track (groove) and extending radially across to the adjacent information track but not touching it, hence separated there from by a partition wall. Note that the width of these pits varies, but are less than the width of the groove.

b) Nakayama et al is relied upon for the reasons stated in parent file 09/140975 as stated on pages 3 and 4 in the OA of 2/12/02.

c) Inui et al, applicants' attention is drawn to figures 1,4,5,6, and 10 and the description thereof.

The examiner interprets the above documents to depict pits having the same depth as the information track (groove). The placement of either preamble or postamble information is merely a substitute of equivalents and a rearrangement of parts with no unexpected results seen to occur thereof. This argument is also present for the product claims 8 and 13.

The examiner interprets the method limitations of claims 18 and 7 as flowing from the product, and hence met.

If applicants can convince the examiner that the phase pit depths of the phase (pre) pit is not equal to the depth of the information track (groove), then the examiner would rely upon Takahashi et al which teaches such an ability in this environment, see claim 4 for instance.

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It would have been obvious to modify the base system of any of the above base systems to either Onagi, Nakayama et al or Inui et al with the above additional teaching from Takahashi et al, motivation is as discussed in Takahashi et al.

Applicants' attention is also drawn to Miyagawa et al and Ohta et al which teach that the depths of the pre pits (phase pits) and the groove is "substantially" equal.

***Response to Arguments***

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

5. Claims 2, 3, 9,10,11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art as applied to claims 1, 8 and 13 above, and further in view of Tsuchiya et al.

The limitations recited (it is noted that claims 9,10, 11 and 15 duplicate claims 2 and 3 respectively, and hence the examiner will only discuss the limitations of claims 2 and 3 specifically, but the position taken is the same for claims 9,10,11 and 15) are found in the secondary reference to Tsuchiya et al - note his values for TP (track pitch), spot size, pit width.

Although the groove width is not specifically recited, the examiner takes the position that the groove width in this environment ranges from .4 to .6 micrometers.

The examiner interprets the limitations of these claims to be modifications of the acknowledged prior art in order to maximize/optimize system parameters. Obviously the ability to provide for cross talk prevention is one of those parameters as is increasing recording density.

6. Claims 2-5,9-12,14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art as applied to claims 1,8 and 13 above, and further in view of Mieda et al or Sugaya et al

Again, the limitations of claims 9-12 and 14-17 are found in claims 2-5, and hence the examiner will discuss the limitations of claims 2-5.

Either Mieda et al or Sugaya et al depicts optical records having a plurality of pit formats available for maximizing system parameters such as cross talk reduction/ increasing recording density.

In Mieda et al, figs. 3-5 provide for a variety of parameters to be varied.

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The examiner interprets the "short pit" parameters for meeting the limitations of claims 2 & 3, while the "long pit" parameters for the limitations of claims 4 and 5.

It would have been obvious to one of ordinary skill in the art to modify the acknowledged prior art with the above teachings from Mieda et al -motivation being to maximize system parameters.

Applicants' attention is also drawn to Sugaya et al, which also teaches the parameter variations re TP, LP, and BD and can be relied upon to meet the limitations of claims 2,3, 9,10,14 and 15.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

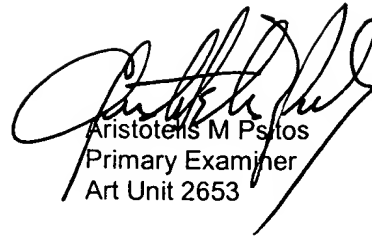
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Aristotelis M Psaros  
Primary Examiner  
Art Unit 2653

AMP  
October 16, 2002